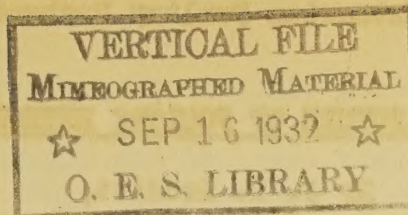


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UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION POULTRY HUSBANDMAN

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H. L. Shrader, Senior Extension Poultry Husbandman

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THE FUTURE OF POULTRY EXTENSION

By J. R. Redditt,
Extension Poultry Specialist,
University of Nebraska

Before we can chart a course for the future very intelligently, perhaps we should determine where we are and how we arrived. A brief review of methods and accomplishments may possibly help to analyze some of the factors that have had a part in getting us where we are.

Poultry Extension in its Early Stages

Fifteen years ago when poultry extension was quite new, the work consisted largely of poultry talks at community gatherings, exhibition judging at county fairs, and winter poultry shows. Many States passed egg-candling laws, so egg-candling demonstrations were frequently features of these meetings. Caponizing was also a popular demonstrational feature. Attempts were made to explain away the doubts and fears of artificial incubation and brooding. Selecting specimens for exhibition, mating breeding pens, preserving eggs in water glass, discussing egg quality, housing, diseases, cures, and tonics, preparing homemade lice powder, explaining feeds, nutritive ratio, and home mixing feeds were among the topics of the time.

It was about this time that "going light" was found to be fowl tuberculosis. Tuberculous hens permitted poultry extension demonstrators to almost bowl over their audiences with post-mortem examinations. Today we are rather bitter in our criticism of the quack poultry "doctors" and remedy salesmen but I wonder if we are not to blame for having taught them this spectacular, interest-getting demonstration. (If county agents had been in existence at the time, we could blame them.) Much was said about marketing but California was about the only State to do much about it. In the Middle West particularly and on most general farms, poultry was looked after by the women folks. A poultry meeting was almost a ladies social event with very few men present. Men who gave very much thought or attention to poultry were looked upon with suspicion. Poultry work was simply beneath the dignity of the men folks, when in fact, poultry progress requires the interest of both men and women.

Ten years ago, poultry culling was the popular extension activity. Few other lines of work, regardless of the phase of agriculture, surpassed poultry culling. We were looked upon as real experts and magicians in those days. Poultry records keeping came into popularity about that time.

A contributing factor perhaps was the test that flock owners were asked to make of the culling. When the good and poor layers had been separated, the flock owner was asked to keep a record of the production of the two flocks until he was convinced that there was something in culling. Poultry club activities with judging and demonstration teams, county poultry tours, and field days, and poultry-house and brooder-house-equipment demonstrations were new and popular phases of poultry work which came into being either during or immediately following the war. At this time, the work was being organized along more or less definite project outlines.

Commercial poultry industries such as hatcheries and feed mills were coming into their own about 10 years ago. There was profit in keeping poultry. The poultry population was increased and interest in poultry production as a commercial possibility was manifested in many sections. Just as the poultry population increased, so did diseases. Remedies became very profitable sidelines for an enterprising element. Much of the disease situation is known to be a result of poor housing conditions as well as a lack of sanitation in brooding and management. This situation naturally led to the development of extension programs having for their purpose the control of diseases. Up to this time there still had been no very definite marketing programs outlined. Practically all our attention was directed toward production. All this occurred during a period of general prosperity and the poultry business advanced itself without a great deal of effort.

Five years ago accreditation, certification, record of performance, grow-healthy-chick projects, equipment projects, cost-account projects, more hatcheries, increased production of broilers, increased production of turkeys, and revised 4-H club outlines made up a major portion of the extension poultry program. In Minnesota, Nebraska, Missouri, Utah, Wyoming, and possibly several other States some attention was given to cooperative marketing with all States stressing quality in eggs and poultry. This worthy movement failed to take very effectively in the Midwest. Flocks were small and widely scattered. We lacked volume.

In the 5-year periods down to date, we may note some of the things mentioned as problems 15 years ago are still among our major problems. The quality of market eggs and disease control are among them. Incubation is scarcely a farm poultry problem any more. Commercial hatcheries and custom hatching have replaced home incubation. Marked improvement has been made in artificial brooding. Much of this is due to the improvement in all brooding and poultry-raising equipment. Sanitation and convenience have influenced the type of equipment in popular use to-day.

Danger of Exploitation

The status of agriculture is acute. It behooves every farmer to make everything on the farm pay. Poultry has long been and still is among the most profitable possibilities on the farm. It is during periods of depression that some of these overlooked possibilities come to light. With more or less sudden realization of these unrecognized possibilities frequently comes exploitation on the part of unscrupulous agents.

It is unfortunate that the average farmer knows so little about poultry. It is this that makes him a victim of patent remedy agents. As has been said, extension poultrymen and county agents who go around posing as pathologists by doing some magic blood smearing, making post-mortem examinations, and pronouncing some diagnostic prognostics of which little is known, are paving the way for the quack remedy salesmen. If we want the farm poultry raiser to think about health in his chickens do we not defeat our own purpose by diagnosing and talking disease? We hold out hope that a cure may eventually erase all the trouble. Wouldn't our programs have a more beneficial and lasting effect if we dropped all attempts to teach Mr. Farmer what we think we know about a lot of different diseases when the same one method of sanitation and management is, after all, his only dependable hope?

Extension Teaching Must be Effective

Poultry production on the general farm is suffering along with other enterprises during the depression. On this account, there has been less interest in poultry. In some instances it may have lessened the demand for extension assistance. Where this is true, the need for extension service is greater. It suggests that previous extension poultry teachings have not been accepted or made effective. Such a situation is a challenge to us. If the industry is sick and suffering from neglect, any more negligence will only make matters worse. Our job then is to create a demand for our services. It is well known, of course, that in order to create the demand we must first convince the poultry raisers that our program contains something they need. To do this, it may be necessary in some cases to revise our program of work. Changes in the programs of work, however, may be of less importance in many instances than changes in schedules of work. Instead of attempting to spread a project all over a State the first year or second year, we must concentrate in a limited area until it has really taken root. If six consecutive, monthly meetings in the same locality by the same specialists are necessary to make the work take hold and stick, by all means hold the six meetings.

The effectiveness of our teachings may be lessened by our own overzealousness. We sometimes fail to take into account the fact that we are working with volunteer help. In the classroom, we can make assignments and demand and enforce certain standards of efficiency. With volunteer adult cooperators we must recognize and adjust ourselves to this difference. Unless we can take some disappointments graciously, our program may suffer.

Fitting the Extension Program to the Industry's Needs

According to R. W. Dunlap, Assistant Secretary of Agriculture, poultry ranked third among animal industries in 1929, furnishing 20 per cent of the total. Dairying was first with 31 per cent and hogs second with 23 per cent. Since the poultry industry has attained its present proportions much is being said and written about the proper direction of it. Perhaps it could be said that had we given a little more thought to the raising of this child, we could direct its progress more intelligently and successfully to-day. If there were fewer producing units this might apply but with more producing units than any other phase of agriculture, it is practically impossible to outline a plan that very many will follow. This is especially true of small-flock owners who make up probably 75 per cent of the producers.

A large-flock movement started by Oregon seven or eight years ago has gained sufficient merit to justify other States advocating it. The Oregon slogan is 40 hens or 400 and Nebraska's is 50 or 500. The object is to have the farm, which is producing eggs for market, produce enough to make production and marketing profitable. Large-scale, efficient production naturally requires large flocks. Large flocks enable flock owners to reduce overhead and thus lower the cost of production. As this movement grows, and it is growing, the quality of eggs will improve. With improved quality will come increased consumption. The large-flock owner has so much at stake that he can not afford to be careless or negligent.

Another encouraging thought is that very few of the 75 per cent class of farm-poultry raisers are actually making any profit with their poultry. It is equally true that very little profit can be made by the buyers who handle the product of such raisers. The reason is that in the average small flock it is almost impossible to make market returns cover production and overhead costs.

The product from small flocks is usually of inferior quality. It is marketed at longer and more irregular intervals. Its low quality makes it move slowly and this helps to reduce the profit. Small flocks

may be classed with the home gardens. They are to supply products for the owner's home. The market gardener produces enough to justify the overhead required for producing a high-quality product. A poultryman whose product will stand competition in the market must also be equipped to produce the best. Where he is so equipped he must have volume to cover overhead.

Solution of the Marketing Problem

It has recently been reported that in some Corn Belt States there is a poultry-and-egg buyer for about every 30 farmers. This is entirely too many for the size of the flocks. It would be too many even if the flocks were several times their present size. If the surplus-producing flocks were several times their present size, it is certain there would be fewer dealers because many of the present small huckster dealers would find few flock owners willing to do business with them or any agency that could not handle the products in a creditable manner.

A poultry program that would eliminate the nonprogressive, non-grading, careless type of produce dealer would help the industry. Unless eggs are sold on grade, there is no incentive to improve egg quality. If quality in eggs is neglected, the industry and all who are associated with it suffer because the consumer demands quality and if he can't have it in eggs he will do without the eggs. Someone else will give him quality in another product. Maybe it will be a synthetic egg.

With large flocks producing the bulk of the poultry and eggs, marketing problems will practically solve themselves. Assembling will be quicker and less expensive. Greater use can be made of refrigeration. Efficient marketing with volume and standard grades will readily replace our present inefficient, nongrading, small-unit methods.

Large flocks will give to poultry the dignity and distinction any enterprise is entitled to have but which poultry has not enjoyed because it has been a pin-money enterprise. Poultry is looked upon in too much of an apologetic manner by too many people.

Poultry extension programs can be more definitely outlined, efficiently conducted, and beneficial in results when the work is conducted among a class of interested people or of large flock owners who regard the poultry business with respect and look upon it as a dependable source of income.

Proof that it is a dependable source of income is probably the first important step toward a more stabilized industry. Fortunately, most States are doing considerable record-flock and cost-account work

already so that in spite of a lot of stumbling it looks as if the right kind of proof will be available for use in furthering a program worthy of the poultry industry and of these producers whose loyalty and cooperation have given assurance to progress. Greater emphasis on the part of extension poultrymen toward large flocks for those producing a market surplus and smaller home flocks for the average farmer would help advance the industry.

Summary

1. Early poultry programs lacked definite objectives.
2. Caution is needed to guard against misinterpretation and exploitation.
3. Present-day projects must help lower production costs to meet lower price levels.
4. A program based on a flock of 50 or 500 birds would be beneficial to the poultry industry.

GROW-HEALTHY-CHICK REPORTS

Pennsylvania, 1931

Effect of Number of Practices on Percentage of Mortality

Number of 5 practices followed	:	Chicks started	:	Mortality up to Nov. 1	:	Per cent mortality
0	:	393	:	62	:	15.78
1	:	10,660	:	1,135	:	10.65
2	:	30,471	:	4,096	:	13.44
3	:	65,043	:	7,447	:	11.45
4	:	63,791	:	5,711	:	8.95
5	:	24,793	:	2,336	:	9.42

The practice, clean management, could not be measured effectively so was not included in the summary. Clean brooder house and clean litter were combined. The date of hatching appeared to be of such importance that it was included when a summarization of records was made.

Effect of Adoption and Neglect of Each Practice

	Per cent mortality of chicks	
	: Practice adopted	: Practice neglected
Hatching before May 1	: 9.51	: 10.35
Clean chicks	: 8.15	: 11.10
Clean brooder house	: 9.33	: 10.39
Clean feed	: 9.42	: 10.47
Clean ground	: 9.28	: 10.23

Indiana, 1930

Five counties reported 376 completions in this project in the fall of 1930. The 62 flocks representing 33,035 chicks which were raised in strict adherence to the six or seven health points of the campaign, reported a total mortality of 8.1 per cent as compared with the average of 18.9 per cent for the whole group of 182,067 chicks. Nine of the 10 counties carrying the project in 1931 report a total enrollment of 481,165 chicks in 1,211 flocks.

Rhode Island, 1931

In 1930, 252 poultrymen with 208,749 chicks reported the results obtained in the Grow-Healthy-Chick campaign as compared with 227 poultrymen growing 142,312 chicks in 1931. The number of poultrymen reporting no loss increased in 1931 from 25 to 46. The percentage of mortality has decreased from 18.1 per cent in 1927, when the work was started, to 7.65 per cent in 1931.

Pullorum disease has continued to take the greatest toll from the poultrymen of any one single disease. Testing the poultry flocks was inaugurated in 1925-26 when 8,175 birds on 16 farms were tested, showing 6.97 per cent of reactors. In the 1930-31 season, 22,638 birds on 33 farms showed 4.08 per cent reactors.

Two poultry-flock-improvement associations have for their chief object the eradication of pullorum disease have been organized. They employ a man to test the members' flocks at frequent intervals until the disease is eradicated. The development of the short methods of testing have made this system possible. At the present time the two associations have enrolled 35 individuals owning 50,036 birds.

Florida, 1931

Relation of Chick Mortality, 1928, to Adult
Mortality, Egg Production, and Profits, 1929

Mortality of stock		:	:	:	:
Chicks	Layers	:	Eggs per bird,	:	Value of eggs over
1928	1929	:	1929	:	feed, 1929
Per cent	Per cent	:		:	
8	9	:	168	:	\$2.80
15	10	:	155	:	2.49
26	12	:	143	:	2.15
35	13	:	140	:	2.00
55	19	:	116	:	
26	11	:	145	:	2.29

From records Agricultural Economics Department - Frank Brumley.

* * * * *

In the Oklahoma Grow-Healthy-Chick project, records were received from 191 cooperators who hatched 37,639 chicks. The mortality at the end of 6 weeks was 16.1 per cent, of which 9.54 was due to disease and 6.56 due to accident.

Washington Pullet Rearing Record

	: Chicks	: Mortality	: Per cent	: Pullets	: Per cent
Year	: brooded	: 1st 8 weeks	: mortality	: raised	: pullets raised
	:	:	:	:	:
1931	: 639,487	: 54,404	: 8.5	: 253,986	: 43.3
1930	: 602,861	: 64,506	: 10.7	: 264,487	: 43.8

Data from 20 counties with 767 poultrymen brooding an average of 833 chicks.

Kansas, 1931

Percentage of Chicks Raised, by Breeds

Leghorn (to 3 weeks)	92.6
All heavy breeds (to 3 weeks)	84.9
Minorca	83.3
Wyandotte	89.0

	<u>When tested for</u> <u>pullorum disease</u>	<u>When not tested for</u> <u>pullorum disease</u>
Orpington	88.2	75.0
R. I. Red	81.8	81.6
Plymouth Rock	92.1	88.7

Data from approximately 200,000 baby chicks.

* * * * *

A survey of chick losses during the first four weeks of brooding was made in Oregon in 1931 from some 200 farms. Growers are willing to accept, as normal, losses that do not exceed 5 per cent the first month. More than half the survey records show less than 5 per cent mortality and the average loss for all farms is less than 10 per cent.

* * * * *

Many of the poultry specialists have asked concerning the relationship of the demonstration-farm flocks to the farm-flock layings as reported by the Division of Crop and Livestock Estimates, of the U. S. Bureau of Agricultural Economics.

In this issue there is reproduced a graph showing the production curve of these two groups in certain of the large poultry-producing States of the Middle West.

TURKEY FACTS AND FIGURES

Turkey Costs in Nevada

F. B. Headley, chief of the Department of Farm Development of the Nevada Experiment Station, has issued some data regarding the amount of feed needed to raise turkeys. These data are being used in making budget estimates of feed requirements. The data are on a basis of 100 average turkeys weighing 14 pounds for the Thanksgiving and Christmas markets. In addition to alfalfa hay or alfalfa pasture, 6,300 pounds of grain and 950 gallons of milk are required. Each 100 birds require 180 hours of labor from the time the poults are received from the hatchery until they are plucked for the market, said Mr. Headley in his report. About 40 hours' labor per 100 birds is required to prepare them for market.

The total cash outlay for raising the 100 young turkeys to maturity, with feed prices of 1931, averaged \$220. Other cash outlays included: Cost of poults, \$69; picking, \$15; and miscellaneous expense, \$15. Besides the cash outlay there are certain noncash costs which should be charged against the turkeys. These include \$15 for depreciation, \$15 for skim milk supplied at home, \$72 (estimate for family labor) and an interest charge of \$10. The cash and non-cash costs for mature birds amount to 23.7 cents per pound of dressed turkey.

Connecticut Turkey Survey 1930-1931

Class of Producers	1930				1931			
	No. of:		Per		:		Per	
	farms		cent		:		cent	
	Hatched	Raised	died		Hatched	Raised	died	
*Registered	55	12,292	9,274	24.6	17,077	12,567	26.4	
Non-registered	103	5,056	2,877	43.1	7,801	4,680	40.0	
Total	158	17,348	12,151	30.0	24,878	17,247	30.7	

*Producers registered with State Bureau of Markets to sell native, fresh-killed, graded birds.

How Turkeys Were Sold

Year	To city retailers			Retail at farm			Total Sales		
	Per	Per	:	Per	Per	:	Per	Per	:
	cent	cent	:	cent	cent	:	cent	cent	:
	live	dressed	Total	live	dressed	Total	live	dressed	:
1929	24.4	15.3	39.7	16.5	43.8	60.3	40.9	59.1	:
1930	9.4	42.1	51.5	9.8	38.7	48.5	19.2	80.8	:
1931	9.9	53.5	63.4	9.7	26.9	36.6	19.6	80.4	:

Report of Committee on Turkey Investigations

Each year at the U. S. Range Livestock Experiment Station, Miles City, Mont., there has been held a conference of animal husbandry and other specialists on range livestock problems. The following report of the committee on turkey investigations was adopted by this conference:

This committee, after reviewing the problems confronting the turkey industry, makes the following recommendations with respect to services which may be rendered that industry by State and Government agencies through their research and extension departments:

1. Whereas the control of disease is of primary importance to the turkey grower, we recommend that research work with diseases and parasites be carried out by trained veterinarians and pathologists, with special reference to sanitation.

2. Whereas the Northwestern Turkey Growers Association has successfully demonstrated, through a central selling agency made up of local pools which have retained their own identity, that collective marketing is entirely reasonable and financially profitable, we recommend that, as far as it is possible, this system be applied to these States and also that the method of grading used by this selling agency in the 1930-31 deal be retained.

3. Whereas the proper nutrition of turkeys not only is an important factor in the development and fattening of young stock but also is necessary in the maintainance of mature birds and for the production of hatchable eggs; and since only a limited number of research studies have been carried out in this field, we recommend that work of a fundamental nature be carried out with special reference to the utilization of feedstuffs available in this area.

4. Since many factors that directly affect the value of the marketable carcass are influenced by heredity, we recommend that more breeding work be done in this field, such as breeding for size and type of body and early maturity.

5. Since it has been thoroughly demonstrated that, with the modern domesticated turkey, some type of shelter is an economic advantage, we recommend that more attention be directed to types of houses and shelters for growing and mature stock.

6. Inasmuch as considerable contribution has already been made covering the requirements of artificial incubation and the feasibility of these methods has been proved, we recommend that publicity of the results obtained be given. At the same time we recommend continuation of the research work already under way, dealing with natural incubation and that further studies be made of the correlation between nutritional and incubation problems.

7. As an accompaniment to feeding and breeding work we recommend that investigation be made to determine the yield and quality of turkey flesh through boning, cooking, and palatability tests.

Lights for Turkey Hens

At the U. S. Range Livestock Experiment Station electric lights were used for the first time in 1932. The lights were turned on certain pens from 4:00 a.m. until daylight beginning February 9. In these lighted pens the first eggs were laid March 4 and the birds came into production rapidly, laying 50 per cent by March 20. The birds not under lights started to lay March 20 and by the end of the month were laying only at the rate of 12 per cent.

Mr. S. J. Marsden who has charge of the turkey investigations states that the use of the lights advanced the season approximately three weeks.

* * * * *

The United States Department of Agriculture through the Division of Farm Management and Costs is conducting a turkey study. The lists of turkey growers are being compiled and thanks to the cooperation of many of the specialists, we hope to have approximately 10,000 names on this list. The questionnaire should furnish some much-needed material for the poultry specialists who are working with turkeys.

* * * * *

A new film strip on Turkey Production, No. 282, has been completed by the U. S. D. A. Extension Service. This strip has 34 frames.

From The 1931 Wyoming Annual Report

Fifty-seven cooperators kept records of the cost of production of turkeys. An increase in the size of turkeys has been noted. In one county old hens delivered to the marketing pool averaged 12 pounds and old toms 23 pounds.

One county also reports an average of 16.3 turkeys raised per hen in 1931 as compared with an average of 10 reported in 1930, and 74.5 per cent of the turkeys hatched were raised in 1931 in comparison with 65.7 per cent raised in 1930.

Boys' and girls' 4-H turkey clubs have been more popular in 1931 than previously. Two teams representing Converse and Weston Counties gave demonstrations at the Wyoming State Fair. 4-H turkey club members in Converse County report an income of \$78.09 per member.

Results of a Delaware Turkey Survey

Issued March 18, 1932 by H. S. Palmer

Number of farms reporting	20
Number of turkeys raised in 1930	1,642
Number of breeders used in 1931	152
Number of poults started in 1931	2,002
Number of turkeys raised in 1931	1,698
Number of breeders kept for 1932	182
Number of farms hatching with hens	14
Number of farms hatching with incubators	6
Number of farms brooding with hens	10

Number of farms brooding with brooder stoves	10
Number of farms allowing turkeys free range	10
Number of farms confining turkeys to small yards	10
Number of turkeys sold before November 16, 1931	665
Number of farms selling turkeys alive	12
Number of farms selling turkeys dressed	11
Average price for young turkeys alive	30-1/2¢
Average price for young turkeys dressed	37¢
Number of farms reporting losses from blackhead	8

Texas

The publication EXTENSION WORK IN TEXAS, 1931 gives the following:

"Turkey flocks handled by 917 men and boys in 46 counties by demonstration methods made net profits of \$2.04 per bird. Of the 60,614 sold by the end of the year out of flocks numbering 71,371 turkeys, 85.7 per cent graded No. 1 birds."

Ruel McDaniel, in the March issue of the Southwest Poultry Journal, states that Texas is the leading turkey-producing State in the Union. During 1931 a total of 1,316 carloads representing nearly two million turkeys were shipped from the State. This year's deal was 21 per cent greater than in 1930. In addition to shipments out of the State it is estimated that 500,000 turkeys were consumed at home.

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Reports from McCulloch County, Tex. state that 12,000 turkey eggs were shipped during March and April, 1932, and the shipments are expected to continue until late May. Turkey growers in an adjacent county, Mason, have shipped a total of 14,000 eggs. Many of these have gone to eastern hatcheries. The usual price has been 20 cents per egg while in some sections the price has been 30 cents each for flock eggs.

Recent Publications on Turkeys

- *The Connecticut Turkey Industry, by Sidney A. Edwards, State Department of Agriculture, Hartford, Conn. Issued March 1, 1932.
- *The Vermont Turkey Deal, Circular No. 4. Vermont Department of Agriculture, Montpelier, Vt., Issued March 15, 1932.
- *Turkey Enterprise Efficiency Study, March 1, 1930 to February 28, 1931, Tehama County, Calif. Agricultural Extension Service, Berkeley, Calif.
- **Growing Turkeys in Confinement, by Thompson, Schnetzler, and Albright, Oklahoma Experiment Station Bulletin 202, Stillwater, Okla.

**Feeding Different Amounts of Protein to Growing Turkeys, by J. M. Moore,
Reprint from Michigan Agricultural Experiment Station, Quarterly
Bulletin Vol. XIV, No. 3, East Lansing, Mich.

**Turkey Production, by William C. Monahan, Extension Leaflet No. 140,
March 1932, Massachusetts State College, Amherst, Mass.

**Turkey Raising in Washington, by J. S. Carver and W. D. Buchanan,
Extension Service Bulletin 159, State College of Washington,
Pullman, Washington.

**Blackhead in Turkeys, - Surgical Control by Cecal Abligation, Research
Bulletin 133, College of Agriculture, Columbia, Mo.

* Mimeographed

** Printed

PHILOSOPHY OF POULTRY EXTENSION WORK
Philosophy of Poultry Extension Work

"The objective of poultry extension work is not to outdo some other State or to reflect credit or glory upon the extension worker. The objective is to help farmers increase their revenue in order that they may enjoy a higher standard of living; support, entertain, clothe, educate, their children; and lay aside a pittance for declining years of life. There is no other choice and no other compensation. The Extension Service is the hired agency charged with this responsibility. If it succeeds in a partial way with its objective, the taxable wealth of the State is increased, better citizenship is acquired, and through better home atmosphere all civilization is benefited. In return, the Extension Service and the subject-matter department get a select and valued group of supporters, which they must have to perpetuate their field of public service. The extension worker is on the spot most of the time. In executing a well-defined program in an uncompromising manner, enemies are accumulated and petty jealousies creep in at the most unexpected points. The work is continuous and has no earthly chance of going farther than a given stage of progress. There is no resting place; there is no completion. In itself, there is no future aside from broken health. The job involves exposure, danger, irregularities of eating and sleeping, isolation from family life, and ultimate resignation.

"Despite the handicaps, the work of extension poultryman is the most fascinating, interesting, and constructive of any branch of institutional work. There is constant action. The human element is always present. The secrets and problems of home and pocketbook are poured into the ears of the extension worker. There is every urge to go beyond the limit of normal patience and endurance. People as a rule are sincere and appreciative. The work has its compensations that far outweigh its disadvantages for the man whose temperament thrives upon the satisfaction of doing certain types of missionary work.

"Poultry industry needs respect of capital. The poultry industry has expanded itself by individual thrift rather than by extended credit.

"Fundamentally it is unquestionably the quality of young stock reared (not the rise and fall of egg prices) that metes out success or failure to producers.

"Chicks are too often produced from a multiplying maturing rather than a breeding mating."

H. E. Crosby-Oregon.

MISCELLANEOUS

Stephen M. Walford, poultry specialist in Purdue University, has analyzed the demonstration-flock figures from a standpoint of groceries because after all, he says, most of the chicken money is spent that way. His data show that the grocery income per hen for the year ending October 1, 1931, was almost as much as for the previous year. This resulted in spite of the fact that the average price received per dozen eggs dropped from 30 cents in 1929-30 to 21 cents in 1930-31.

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In keeping with the economic conditions, New Jersey has revamped the poultry plan of work and has called the new project "Economy of Poultry Production."

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Nebraska has added a "family-sized flock" project to its plan of work this year. It includes small portable house and brooder, simple hoppers, and temporary summer quarters for laying hens. It can be adopted by tenant farmers whose equipment is often lacking.

* * * * *

In Oklahoma the Junior Department of the State Poultry Show now divides the prize money according to the number of entries. In the judging contest a similar distribution takes place with \$25 for the winner and \$3 for the fiftieth individual.

Another feature is a prize for shipping coops offered by the Oklahoma State Poultry Federation. Specifications for the coops as to capacity, weight, and size of door are given. When the birds arrive the coops are scored.

Poultry Housing References

A total of 84 references to bulletins and circulars on poultry house construction is given in a recent U. S. Department of Agriculture publication entitled "Bibliography Relating to Farm Structures." Ask for Miscellaneous Publication No. 125.

Letter Writing

L. E. Frailey in "Printed Salesmanship" says:

"I meet a lot of funny people in the letters I get. Anyone does. The three beggars - beg to remain, beg to advise, and beg to acknowledge. The inclosure twins - attached hereto and enclosed herewith. The terrible triplets - Ult, Inst, and Prox. The prophets - thanking you in advance and anticipating your order. Queer, unnatural people - parading across my desk like shadows of another world.

They remind me of an "ancient lullaby" someone wrote:

"We beg to advise you, and wish to state
That yours has arrived of recent date.
We have it before us, its contents noted;
Herewith inclosed are the prices quoted.
Attached you will find, as per your request,
The sample you called for; and we would suggest
Regarding the matter and due to the fact
That up to this writing your order we've lacked.
We hope you will not delay it unduly
And we beg to remain, yours very truly."

Don't write that way. Why fill your letters with mean-nothings? The good business letter is friendly, sincere, and natural.

Summary of Reports on Demonstration Farm Flocks, November 1, 1930 - October 31, 1931

State	Remarks	Number : farms	Size : flocks	Eggs : per hen	Per cent : mortality	Per cent : culled	Feed : cost : per hen	Difference : cost and income : per hen	Labor : income : per hen	Feed : cost : doz. eggs	Selling : price per doz. eggs
Arizona	Oct. to Sept.	10	302	145.0	25.4	52.3 Pullets	\$	\$	\$	\$	\$
Connecticut		200	423	163.2	20.3 Pullets	95.5 Hens					
Delaware		123	354	139.0	22.7						
Florida		51	334	153							
Georgia		37	350	154.2			2.01				
Indiana		93	262	152			1.72*		1.16	0.262	.21
Iowa		48	206	142.9	16.5		1.50	1.47	.90		
Kentucky		127	94	146			2.24*		1.19		
Maryland		143	352	136.26	17.7 Pullets	46.0 Pullets					
Massachusetts					16.6 Hens	70.4 Hens					
Minnesota		64	320	149.3	15.3	63.0	1.43	1.25		.20	
Mississippi			246	146	14.0		1.90	1.73			.17
Missouri	Farm	343	161	154			1.46	1.46			.18
	Commercial	49	553	164.69			1.46	1.54			.22
Montana		26	141	142.3	11.0		1.19		1.23	.09	.137
Nebraska		26	361	135	12	55	1.32		.77	.12	
North Carolina		162	171	152.64			1.63	1.33			
North Dakota		25	125	135.0	17.0		.86		.53	.07	.229
Ohio		233	294	154.9	16.2	40.4	1.51	1.20	1.11	.113	.143
Oklahoma		240	163	148			1.10			.09	.266
South Carolina		110	151	139.0	15.1		2.34*		1.59	.152	.204
Tennessee		109	127	152.6			2.06				.159
Texas		713	163	147	15.5	48.5	1.11	1.03			
Vermont		54	303	152	14.5 Pullets	73.7 Pullets					
Wisconsin	Oct. to Sept.		134	177.34	10.7 Hens	93.0 Hens		2.02		.122	.202

*Includes cost of feed to young stock

EGG-PRODUCTION CURVES FOR TWO GROUPS OF PRODUCERS IN MIDDLE WEST NOVEMBER 1, 1930 TO OCTOBER 31, 1931

